

REMARKS

Election/Restrictions

Applicant affirms the election of Group 1, claims 1-11 and 21-28.

Section 112 Rejections

Claims 6-10 and 21-28 have been rejected under 35 U.S.C. 112 for being unclear as to the term "said rolling bodies."

Applicant has clarified the term "said rolling bodies" in the claims, to refer to the reference rolling body, the auxiliary rolling body or bodies, or where appropriate, the additional rolling bodies.

Claim Rejections

Independent Claim 1 and its remaining dependent claims 2-11 and 21-28 have been rejected under 35 U.S.C. 102 and 103(a) as being unpatentable over French Pat. No. 2,767,810 to Boscher et al. (hereinafter referred to as "Boscher"), either alone or in combination with brochures published by the W. Haldenwanger company, as well as the NIST materials property data summary for sintered silicon carbide.

Independent claim 1 has been amended to more clearly express the invention, with most of the amendments being for syntactical reasons. Claim 1 now recites a method for producing a cylindrical glass body in a vertical drawing process that includes a method step in which a glass blank is supplied to a heating zone, and softened zonewise, and in which a glass strand is drawn off using a draw-off device at a controlled drawing speed from the softened area. The draw-off device has a first draw-off unit with rolling bodies rolling on the glass strand and being

distributed around its circumference. The rolling bodies include a reference rolling body and at least one auxiliary rolling body. The reference rolling body and the auxiliary rolling body or bodies each have a respective torque acting thereon which is dependent on the weight of the drawn-off glass strand. The drawing speed is controlled by setting a speed of the reference rolling body. A value of or correlated to the torque acting on the reference rolling body is determined and the determined value is used as a setpoint torque for adjusting the torque acting on the at least one auxiliary rolling body. The value is determined repeatedly or continuously and the setpoint torque is a variable setpoint torque used to repeatedly or continuously adjust the torque of the at least one auxiliary rolling body.

The present invention produces a quartz glass body that has minimal surface deformity caused by the draw-off device in a vertical drawing manufacturing process. See specification, page 2, lines 15-21. In contrast, prior art methods for producing quartz glass bodies encounter the problem of damage to the surface of the glass body, as well as bending of the drawn-off glass strand due to varying amounts of torque being applied to the various rolling bodies used to draw the glass strand. See specification page 3, lines 25-30.

The method of independent claim 1 as amended is not suggested by any of the cited prior art, and reconsideration of the rejection is respectfully requested.

Boscher teaches a method for drawing a capillary for a glass capillary tube by using two pairs of rolling bodies, one of which serves as a driving rolling body that is rotated using a motor at a constant rate. Boscher translation, Page 1, Paragraph 7, Page 3, paragraph 9. A predetermined rotation speed for the driving rolling body is determined by measuring the diameter of the capillary above the wheel using a measuring device, and the driving rolling

body is constantly rotated at the predetermined rotation speed throughout the drawing process. Boscher translation, Page 4, paragraph 2. The drawing body is rotated at a constant speed, even as the torque acting on the driving roll changes. Boscher translation, Paragraph 9. The auxiliary rollers are rotated using separate motors, which are configured to apply and maintain a constant torque on the rollers throughout the drawing process. Boscher translation, page 3, paragraph 10. A constant torque is applied to each of the auxiliary rollers, even as the drawing rate changes. Boscher translation, page 3, paragraph 10.

The Examiner has read Boscher to suggest regulating the amount of torque acting on the reference rolling body with respect to the weight of the drawn-off glass strand, but Boscher does not suggest determining a value of or correlated to the torque acting on the reference rolling body and using that determined value as a setpoint torque for adjusting the torque acting on the auxiliary rolling body or bodies. Furthermore, Boscher does not suggest repeatedly or continuously adjusting the torque acting on its driving rolling body or on the auxiliary rolling bodies with a setpoint torque of the driving rolling body. Therefore, Boscher fails to suggest a method as recited in claim 1.

The brochures published by the W. Haldenwanger company, as well as the NIST materials property data summary for sintered silicon carbide are cited only to suggest use of dependent features of claim 1, which does not impact upon its patentability.

Applicant has also added new independent claim 29 and its dependent claim 30.

Independent claim 29 distinguishes over the cited prior art for reasons similar to those expressed above in regard to claim 1, and its allowance, together with its depending claim is respectfully requested.

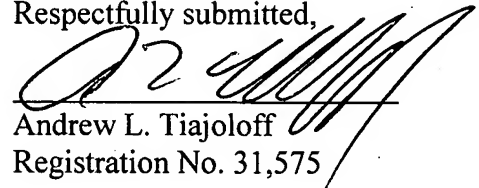
All claims having been shown to distinguish over the prior art in structure, function and result, formal allowance is respectfully requested.

Should any questions arise, the Patent Office is invited to telephone attorney for applicants at 212-490-3285.

Tiajolloff & Kelly.
Chrysler Building, 37th floor
405 Lexington Avenue
New York, NY 10174

tel. 212-490-3285
fax 212-490-3295

Respectfully submitted,



Andrew L. Tiajolloff
Registration No. 31,575